## STRYKER SPINE 510(k) Summary: Trio® Trauma Spinal System

MAR - 4 2011

Submitter:

Stryker Spine

2 Pearl Court

Allendale, New Jersey 07401

Contact Person

Mr. Curtis Truesdale

Regulatory Affairs Project Manager

Phone: 201-760-8296

FAX: 201-760-8496

Email: curtis.truesdale@stryker.com

Date Prepared

March 4, 2011

Trade Name

Stryker Spine Trio® Trauma Spinal System

**Proposed Class** 

Class III

Classification

Name and Number

1) Pedicle Screw Spinal System, 21 CFR §888.3070

Product Code

NKB, MNH, MNI

**Predicate Devices** 

Synthes Spine USS Fracture System: 510(k) K010658

Stryker Spine Mantis Systems: 510(k) K102235

Stryker Spine Trio+ Spinal System: K100737, K052971

Stryker Spine Xia® 4.5 Spinal System: 510(k) K050461, K052761

Device Description

The Trio Trauma Spinal system consists of cannulated pedicle screws in a variety of diameters and lengths, 6.0 mm diameter rods that are offered straight and pre-bent (rad rods) in a variety of lengths and an offset connector. The offset connector is supplied in one size, which accommodates the 6.0 mm diameter rods. The system components are

manufactured from Titanium alloy (Ti6Al4V)

Traditional 510(k) Premarket Notification

Intended Use

The Stryker Spine Trio Trauma Spinal System is intended for percutaneous, posterior, non-cervical pedicle fixation of the spine to provide immobilization and stabilization of spinal segment in skeletally mature patients as an adjunct to fusion for the following indications: degenerative disc disease (DDD) (defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies); spondylolisthesis; trauma (i.e. fracture and dislocation); curvature (i.e. scoliosis, kyphosis, and or lordosis); tumor; pseudoarthrosis; and failed previous fusion.

Summary of the Technological Characteristics

Documentation has been provided to demonstrate that the Stryker Spine Trio Trauma Spinal System is substantially equivalent to the predicate devices in terms of material, design, mechanical performance and indications for use. Static Compression Bending Testing, Dynamic Compression Bending Testing and Static Torsion Testing per ASTM F1717 were conducted on the Trio Trauma System components. In addition, Static Axial Gripping Capacity testing per ASTM F1798 was also performed. The results obtained from these tests were compared to those of a predicate system to demonstrate substantial equivalence, as recommended by the "Guidance for Industry & FDA Staff Spinal System 510(k)s May 3, 2004."

## DEPARTMENT OF HEALTH & HUMAN SERVICES



Food and Drug Administration 10903 New Hampshire Avenue Document Control Room –WO66-G609 Silver Spring, MD 20993-0002

Stryker Spine % Mr. Curtis Truesdale Regulatory Affairs Project Manager 2 Pearl Court Allendale, New Jersey 07401

MAR - 4 2011

Re: K103292

Trade/Device Name: Stryker Spine TRIO TRAUMA Spinal System

Regulation Number: 21 CFR 888.3070

Regulation Name: Pedicle screw spinal system

Regulatory Class: Class III

Product Code: NKB, MNH, MNI

Dated: March 01, 2011 Received: March 02, 2011

Dear Mr. Truesdale:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you; however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act

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or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to <a href="http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm">http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm</a> for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <a href="http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm">http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm</a>.

Sincerely yours,

Mark N. Melkerson

Director

Division of Surgical, Orthopedic And Restorative Devices Office of Device Evaluation Center for Devices and Radiological Health

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Enclosure

## Indications for Use

510(k) Number (if known): K103292

Device Name: Stryker Spine TRIO TRAUMA Spinal System

Indications for Use:

The Stryker Spine TRIO TRAUMA Spinal System is intended for percutaneous, posterior, non-cervical pedicle fixation of the spine to provide immobilization and stabilization of spinal segments in skeletally mature patients as an adjunct to fusion for the following indications:

- Degenerative disc disease (DDD) (defined as back pain of discogenic origin with degeneration of the disc confirmed by history and radiographic studies);
- Spondylolisthesis;
- Trauma (i.e., fracture or dislocation);
- Spinal Stenosis;
- Curvatures (i.e., scoliosis, kyphosis, and/or lordosis);
- Tumor;
- Pseudoarthrosis; and
- Failed previous fusion.

Prescription Use X	AND/OR	Over-The-Counter Use
(21 CFR 801 Subpart D)		(21 CFR 807 Subpart C)
(PLEASE DO NOT WRITE BE	LOW THIS LINE - 0	CONTINUE ON ANOTHER PAGE
IF NEEDED)		
Concurrence of (	DRH Office of Dev	ice Evaluation (ODE)

(Division Sign-Off)

Division of Surgical. Orthopedic,

and Restorative Devices

510(k) Number K 10329 Z

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